Patent Application of

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For

Title: Container and Method for Measuring and Mixing Micro and Macro Amounts

Background--Field of Invention

This invention (hereinafter referred to as "the present invention") pertains to containers, for example a bucket, designed to provide a means for easily measuring and mixing a small amount of one material, for example one ounce of fertilizer (the small amount of material hereinafter referred to as the "concentrate"), and then in the same container, adding a much larger amount of another material, for example one gallon of water (the larger amount of material hereinafter referred to as the "dilutent"). The user will, first, fill the present invention with a concentrate, pouring the concentrate into a supplemental measurement depression formed in the bottom of the container until the proper measurement is reached (this small measurement hereinafter referred to as a "micro" measurement). Then, the user will simply add the dilutent on top of the concentrate, filling the container until the solution (the combination of the dilutent and the concentrate hereinafter referred to as the "solution") reaches one of the large measurement graduations on the sidewall of the container (this large measurement

hereinafter referred to as a "macro" measurement). With this invention, the user has a convenient way to measure and mix the two materials together without a secondary measuring device (such as a tablespoon, a measuring cup or a bottle cap). This is accomplished through novel alterations to the bottom and/or sides of the container or through novel alterations in the orientation and placement of the measurement graduations and the means of reading the measurements. In addition, this invention takes a common sense approach for such a measurement in that it is not necessary to be exactly accurate. To better explain, and using the above example, if you have added one ounce of fertilizer into a container, and then add water until it exactly reaches the one gallon graduation, there is not actually one gallon of water that has been added, but rather, one gallon minus one ounce. The error is less than 1%, which is not of any significance for such common, everyday dilutions. Performing this task with a typical bucket is very difficult given the manner in which the measurement graduations appear on the sidewall. To measure one ounce of concentrate in a bucket, the measurement graduations would have to be very closely spaced, very near the bottom and the bucket would have to be extremely level. It would be very difficult to make this measurement. The present invention alleviates these difficulties through four embodiments to be described herein.

Although the preferred use of the present invention involves buckets, it is very likely that the same concept can be applied to bottles, jars, measuring cups, gas cans, mop buckets, feed pails, water troughs, or any container where one may want to mix two or more materials together in a proportionate and convenient manner.

Prior art includes containers with communicating chambers of various sizes all of which have graduation markings with precision relative to the chamber's size. Prior art

also includes containers with a single chamber and graduation markings with novel orientations, but only of a single precision relative to the chamber's size. Still other prior art accomplishes the task of measuring amounts with different precisions through the use of a secondary device, like the cap of a bottle, for example, to measure micro amounts and the bottle itself to measure the macro amounts.

The following pertains to the present invention, embodiment 1, wherein, a container has a plurality of supplemental measurement depressions formed into the bottom wall to measure micro amounts of concentrate, and then graduations on the sidewall to measure the macro amounts of the dilutent. In Barnett's Liquid Proportioning Container (4,292,846), one must first lay the container on its side, fill a separate chamber with a concentrate to a micro measurement graduation, then place the container upright allowing the concentrate to pour into the main chamber. Then the main chamber is filled with the dilutent to bring the mixture to the proper proportions. Similar methods and design are involved with Fairchild's Mixture Measurer (2,030,975), Johnson's Proportioning and Mixing Graduate (3,948,105) and Merhar's Graduated Proportioning and Mixing Container (5,447,245). With the present invention, embodiment (1), one would instead, fill the first supplemental measurement depression in the bottom of the container with the concentrate allowing it to overflow (communicate) into the next segment if needed, until the proper micro amount is reached. Then, without having to reposition the container, the dilutent is added on top of the concentrate and allowed to fill the remainder of the container up to the dilutent's desired macro measurement graduation.

The following pertains to the present invention, embodiment 2, wherein a container has at least a single supplemental measurement depression positioned and formed in the bottom of the container such that micro measurement graduations may be placed on a wall of the depression. The concentrate is measured within the supplemental measurement depressions itself. The container is then filled with the dilutent as above. This is in contrast with the previously cited prior art in that the prior art requires the concentrate to be transferred to a separate chamber in order to mix it with the dilutent. With the present invention, embodiment 2, the dilutent is instead, poured on top of the concentrate just like in embodiment 1. Additionally, Schneider's Medicine Glass (1,839,268) requires that the segments (depressions of predetermined capacity) be formed in the sidewall. The present invention, embodiment 2, has its segments formed in the bottom. Schneider also claims a receptacle made of a vitreous material (claim 5) whereas the present invention is not.

The following pertains to the present invention embodiment 3, wherein the container is tilted so as to take advantage of the greater scale of accuracy afforded by the sidewall and/or bottom wall graduations. In Hayes' (388,677) invention, the graduations are radiating from a common point. In the present invention, embodiment 3, the container has the typical graduations for measuring the macro amounts. The macro graduations are on the sidewall of the container and are defined by the intersection of the sidewall with any given plane, which is perpendicular to the central axis of the container. The graduations for measuring the micro amounts, however, are defined by the intersection of the sidewall and/or bottom wall with any given plane, which is substantially non-perpendicular to the central axis of the container. In no instance do the

graduations radiate from a common point. Rather, non-intersecting parallel planes define them.

The following pertains to the present invention embodiment 4, wherein the supplemental measurement depressions used for the micro measurement are formed into an auxiliary piece with said piece being attached to a wall of a separate container. In essence, any container can therefore be converted into a measuring device capable of micro measurements. Prior art appears to have ignored this aspect of the present invention, embodiment 4.

The classification of these and the present invention fall into the categories of Measuring vessels with indicating means (73/427), Fluid handling with plural compartments (141/325), Dispensing of various subclasses (222/x), Special receptacles where two or more materials are commingled (206/219), Agitating with stationary mixing chambers (366/341) and Bottles and jars with compartments or indicating means (215/6 & 365).

Summary of the Invention

The present invention is a container where macro measurements can be made using the graduations on the sidewall, but with the added feature that micro measurements can be made as well. This is done by either 1). Using supplemental measurement depressions of various capacities formed into the bottom of the container or by 2). Using a single supplemental measurement depression that has graduations on the depression wall or by 3). Using graduations on the bottom and/or sidewall when the container is reoriented or by 4). Attaching an auxiliary measuring device for the micro

measurements to the inside of an existing container. Prior to the present invention, in order to mix one cup of bleach with one gallon of water in a bucket, one would first have to obtain a measuring cup, pour the bleach into the measuring cup, pour the measuring cup into the bucket, fill the bucket with one gallon of water using the graduations on the bucket's sidewall for reference, then lastly, rinse out the measuring cup. Alternatively, with the present invention in its preferred embodiment, one would pour the bleach directly into the segments in the bottom of the bucket until one cup is reached, then lastly, fill the bucket with one gallon of water using the graduations on the sidewall for reference. With the present invention, the steps of having to find, use and rinse out a measuring cup are eliminated.

Description of the Several Views of the Drawings

Four embodiments are shown in the drawings. Embodiment 1 includes figures 1 through 4. Embodiment 2 includes figures 6 through 10. Embodiment 3 includes figures 11 through 15b. Embodiment 4 includes figures 16 through 21.

Figure 1 is an isometric view of a container with a portion of the sidewall cut away. The cut-away reveals the supplemental measurement depressions used for micro measurements on the bottom wall as well as the graduations used for macro measurements on the sidewall.

Figure 2a is an illustration of the method used to fill the container from figure 1 with a concentrate. This view is shown in cross section to reveal the movement of the fluid used.

Figure 2b is an illustration of the method used to fill the container from figure 2a with a dilutent. This view is shown in cross section to reveal the movement of the fluids used.

Figure 3 is an orthographic projection including 2 sectional views. The top view is looking down into the container through its opening, Section B-B is the front view and section A-A is the profile view. The front view depicts the corrugated structure of the bottom of the container. The profile view depicts the two dams that border the corrugations.

Figure 4 shows a detailed view of the lower left corner of figure 3, section B-B.

Figure 6 is a sectional view through the center of a container. The cross section is perpendicular to the supplemental measurement depression walls shown formed into the bottom. Horizontal lines depict graduation markings for the micro measurements of 1 tablespoon, 2 tablespoons, 3 tablespoons, 4 tablespoons, 1 cup, 2 cups, 3 cups and the macro measurements of 1 gallon, 2 gallons and 3 gallons.

Figure 7 is an alternative configuration of figure 6 where the sloping sidewall of the supplemental measurement depression is "stepped" in order to make the micro measurement graduations easier to read.

Figure 8 is a sectional view through the center of a container. The supplemental measurement depression formed in the bottom would be round if viewed from above. Micro measurement graduations are shown by horizontal lines marked 1 teaspoon, 2 teaspoons and 3 teaspoons.

Figure 9 is an alternative configuration of figure 8 where the supplemental measurement depression formed in the bottom is larger to accommodate slightly “larger”

micro measurements. Horizontal lines indicate the measurement graduations of 1 tablespoon, 2 tablespoons and 3 tablespoons.

Figure 10 is a front and side view of a container with both views being a cross section of each other. The right most view depicts a channel formed in the bottom by two protrusions. Horizontal lines represent the micro measurement graduations of 1 tablespoon, 2 tablespoons and 3 tablespoons. The left most view shows one of the protrusions spanning from one side of the container to the other. Measurement graduations have been removed for visual clarity.

Figure 11 is a sectional view of a regular round container through the center axis of the container. The container has been tipped at about a 45-degree angle. A single horizontal line with hatch marks at the bottom of the figure represents the ground, which is level. Horizontal lines inside the container represent the micro measurement graduations of 1 tablespoon, 2 tablespoons, 3 tablespoons, 4 tablespoons, 5 tablespoons and 6 tablespoons. Three line segments along the sidewall of the container represent the macro measurement graduations of 1 gallon, 2 gallons and 3 gallons.

Figure 12 is a partial view of an alternate configuration of figure 11 wherein the point where the container makes contact with the ground has been formed flat so that full contact can be made with the ground.

Figure 13 is an alternate configuration of figure 11 where the container has been tipped at an angle close to 90 degrees. The micro measurement graduations are marked 1 teaspoon, 2 teaspoons, 3 teaspoons and 4 teaspoons.

Figure 14 is yet another alternate configuration of figure 11 wherein one side of the top rim of the container has been elongated to act as both a handle and a support. The

container has been tipped until the handle/support has made contact with the ground. The horizontal lines represent the micro measurement graduations for 1 tablespoon, 2 tablespoons, 3 tablespoons, 4 tablespoons, 5 tablespoons and 6 tablespoons.

Figure 15a is a layout view where the round figure represents the bottom of a container. Drawn on this round figure is a label, one portion of which is applied to the bottom of a container, and the other portion of which is applied to the sidewall of the container. Horizontal lines on the upper portion of the label represent micro measurement graduations for 1 tablespoon, 2 tablespoons, 3 tablespoons, 4 tablespoons and 5 tablespoons.

Figure 15b is a cross sectional view of a container, which has the label from figure 15a, installed. The container is tilted at approximately 45-degress and is shown resting on a level surface depicted by a horizontal line with hatch marks.

Figure 16 is a top and front orthographic view of an auxiliary measuring device.

Figure 17 is an isometric view of the device of figure 16 with the added feature of having micro measurement graduations for 1 tablespoon and 2 tablespoons.

Figure 18 is a sectional view of a container showing the auxiliary measuring device of figure 16 attached to the bottom of said container.

Figure 19 is a top, front and profile orthographic view of an auxiliary measuring device having five supplemental measurement depressions.

Figure 20 is an isometric view of an auxiliary measuring device similar to figure 19, however it has been modified to include four supplemental measurement depressions instead of five.

Figure 21 is a sectional view of a bucket with the auxiliary measuring device of figure 19 attached to its bottom.

Detailed Description of the Invention

Embodiment 1, Figure 1, shows a container **50** similar to a household bucket but with novel alterations formed into its bottom. The side of the container closest to the observer has been cut-away and removed to make the inside visible. This type of container is typically injection molded using a thermoplastic material. Therefore, forming depressions into the bottom of the bucket involve a simple modification to the mold and adds no extra cost to the bucket itself. A number of supplemental measuring depressions **56a**, **56b**, **56c** and **56d** of substantially equal volume are formed into the bottom of the bucket. These depressions are marked with the measurement indicators "1 TBSP" **70**, "2 TBSP" **72**, "3 TBSP" **74** and "4 TBSP" **76** respectively. In the formation of these depressions yet another set of supplemental measuring depressions are formed, **57a** and **57b**. Depression **57a** abuts a sidewall **61a**. On sidewall **61a** there is yet another measurement indicator "1/2 CUP" **78**. On the container's sidewall **51** are two more measurement indicators "1 GAL" **80** and "2 GAL" **82**. Measurement indicators **70**, **72**, **74**, **76** and **78** are considered micro measurements. Measurement indicators **80** and **82** are considered macro measurements. Of course, any combination of measurements is possible dependant on the shape and size of the depressions that are formed.

Embodiment 1, Figure 2a shows a container **50** in cross section. A bottle of concentrate is being poured **90** into the container. The stream of concentrate **91** is being shown entering the container and starting to fill the supplemental measurement depressions. Figure 2b shows the same container **50**, however, now a dilutent **93** is being added from a garden hose **92**. As the dilutent **93** enters the container, the concentrate begins to mix **95** with the dilutent. The result is a solution **94**.

Embodiment 1, Figure 3, shows a container **50** in SEC B-B, which has a protrusion **54**, which descends downward and becomes the trough apex **52b**. Descending downward from the trough apex **52b** is the interior trough wall **60b**. The interior trough wall **60b** spans the length of the container and borders the eight supplemental measurement depressions **56a, 56b, 56c, 56d, 56e, 56f, 56g** and **56h**. This particular container has eight supplemental measurement depressions, however, there can be any reasonable quantity used in a given design. SEC A-A shows the same container rotated 90 degrees and further details the troughs. On either side of the supplemental measurement depressions are the interior trough walls **60a** and **60b**. The supplemental measurement depression apex 58c is shown spanning from one interior trough wall to the other. This apex **58c** is lower than either trough apex **52a** or **52b**. It is important that the supplemental measurement depression apex be lower than the trough apex in order for a fluid concentrate to be able to spill over from one supplemental measurement depression to the next without spilling over the trough apex. This is what enables the supplemental measurement depressions to communicate with each other. Also shown are the exterior trough walls **61a** and **61b**.

Embodiment 1, Figure 4 shows more detail of the supplemental measurement depressions from figure 3. As a fluid concentrate is poured into the container, it first hits the inner sidewall **51** of the container and continues down the initial descending sidewall **53a** and begins to fill the initial supplemental measurement depression **56a**. The supplemental measurement depression **56a** is defined by the initial descending sidewall **53a**, the initial ascending sidewall **55a** and the trough walls **60b** and **60a** (**60a** is not shown in figure 4). Once the concentrate fills the initial supplemental measurement depression **56a**, it begins to spill over the initial measurement apex **58a**. It does not spill over the trough apex **52b** because **52b** is substantially higher than the initial measurement apex **58a**. As the fluid concentrate spills over the initial measurement apex **58a**, it proceeds down the secondary descending sidewall **53b** and begins to fill the secondary supplemental measurement depression **56b**. The secondary supplemental measurement depression **56b** is defined by the secondary descending sidewall **53b**, the secondary ascending sidewall **55b** and the trough walls **60b** and **60a** (**60a** is not shown in figure 4). Once the fluid concentrate has filled the secondary supplemental measurement depression **56b**, it will spill over the secondary measurement apex **58b** and proceed down the third ascending sidewall **53c** and begin to fill the third supplemental measurement depression **56c**. The third supplemental measurement depression **56c** is defined by the third descending sidewall **53c**, the third ascending sidewall **55c** and the trough walls **60b** and **60a** (**60a** is not shown in figure 4). The fluid concentrate will then spill over the third supplemental measurement depression apex **58c** once the third supplemental measurement depression **56c** is filled. This pattern of events continues either until the user stops pouring the concentrate or until all of the supplemental measurement

depressions have been filled. The advantage of this embodiment is that the user can easily see each measurement depression as it fills up and can easily see when the concentrate spills over into the next measurement depression.

Embodiment 2, Figure 6 is a cross section of a cylindrical container **100** showing two supplemental measurement depressions of a micro scale **121** and **125** that have been formed in the bottom **126**. The supplemental measurement depression **121** is formed by the sidewall of the container **120** and wall **122** and the supplemental measurement depression **125** is formed by the sidewall of the container **120** and walls **124** and **126**. Walls **122** and **124** are shown on edge. The supplemental measurement depression **121** has four measurement graduations **102, 104, 106** and **108**. They have been marked "4 TBSP" **101**, "3 TBSP" **103**, "2 TBSP" **105** and "1 TBSP" **107** respectively. The supplemental measurement depression **125** has three measurement graduations **110, 112** and **114**. They have been marked "3 CUPS" **111**, "2 CUPS" **113** and "1 CUP" **115** respectively. The container itself **100** has measurement graduations of a macro scale **131, 132** and **133**. They are marked "1 GAL" **116**, "2 GAL" **117** and "3 GAL" **118** respectively. This embodiment provides the user with multiple measurement options through the use of non-communicating measurement depressions which have measurement graduations within the measurement depressions themselves.

Embodiment 2, Figure 7 is a cross section of a cylindrical container **150** showing two supplemental measurement depressions of a micro scale **171** and **180** that have been formed in the bottom **181**. The supplemental measurement depression **171** is formed by the sidewall of the container **170** and walls **172, 173, 174, 175, 176, 177** and **178**. The supplemental measurement depression **180** is formed by the sidewall of the container **170**

and walls **182** and **181**. The supplemental measurement depression **171** has four measurement graduations **152, 154, 156** and **158**. They have been marked "4 TBSP" **151**, "3 TBSP" **153**, "2 TBSP" **155** and "1 TBSP" **157** respectively. Walls **173, 175, 177** and **179** are parallel to the bottom **181**. The purpose of walls **173, 175, 177** and **179** are to provide a surface whereby the measurement graduations could be engraved (or otherwise marked) in order to provide easy viewing for the user.

Embodiment 2, Figure 8 is a cross section of a cylindrical container **200** showing one supplemental measurement depression of a micro scale **221** that has been formed in the bottom **226**. Wall **227** shares the same plane as the bottom **226**. Walls **227** and **224** form the supplemental measurement depression **221.** Walls **222** and **224** are conic sections, centered in the container **200.** The supplemental measurement depression **221** has three micro measurement graduations **202, 204** and **206**. They are marked as "3 TSP" **201**, "2 TSP" **203** and "1 TSP" **205** respectively.

Embodiment 2, Figure 9 is a cross section of a cylindrical container **250** showing one supplemental measurement depression of a micro scale **271** that has been formed in the bottom **276**. Wall **277** shares the same plane as the bottom **276**. Walls **277** and **274** form the supplemental measurement depression **271.** Walls **272** and **274** are conic sections, centered in the container **250.** The supplemental measurement depression **271** has three micro measurement graduations **252, 254** and **256**. They are marked as "3 TBSP" **251**, "2 TBSP" **253** and "1 TBSP" **255** respectively.

Embodiment 2, Figure 10 is a cross sectional drawing of a cylindrical container **300,** the left most image being a cross section of the front view and the right most image being a cross section of the profile view. A trough shaped supplemental measurement

depression of micro scale **321** is formed in the bottom **326** by walls **320, 311, 313** and **327**. Wall **327** shares the same plane as the bottom **326**. The supplemental measurement depression **321** has three measurement graduations **302, 304** and **306**. They are marked as "3 TBSP" **301**, "2 TBSP" **303** and "1 TBSP" **305** respectively.

Embodiment 3, Figure 11 is a cross section of a cylindrical container **350**, which has been tilted at a substantially 45-degree angle relative to the ground **390**. The act of tilting the container has created a pseudo supplemental measurement depression of a micro scale **375** that is defined by the container sidewall **370** and the bottom **364**. Notice that the bottom **364** is flat. The pseudo supplemental measurement depression **375** has six micro measurement graduations **352, 354, 356, 358, 360** and **362**. They have been marked "6 TBSP" **351**, "5 TBSP" **353**, "4 TBSP" **355**, "3 TBSP" **357**, "2 TBSP" **359** and "1 TBSP" **361** respectively. These measurement graduations **352, 354, 356, 358, 360** and **362** may encompass the entire container at the intersection of a plane parallel to the ground **390** and any other portion of the container **350** provided that plane's height from the ground corresponds to approximately the correct volume that is indicated. The container **350** has measurement graduations of a macro scale **381, 382** and **383**. They are marked "1 GAL" **366**, "2 GAL" **367** and "3 GAL" **368** respectively. This embodiment provides an alternative way to manufacture a container with micro measurements, by removing the need for "forming" depressions in the bottom.

Embodiment 3, Figure 12 is a modification to the container of figure 11 **350**, whereby a flat wall **395** has been formed at one point where the sidewall **370** intersects the bottom **364**. The flat wall **395** is resting in communication with the ground **390**. The flat wall **395** is at a substantially 45-degree angle relative to the bottom **364**. The flat

wall **395** provides a surface that assists the user in orienting the container at the proper angle for making micro measurements. The act of tilting the container has created a pseudo supplemental measurement depression of a micro scale **376** that consists of the container sidewall **370,** the flat wall **395** and the bottom **364**. The pseudo supplemental measurement depression **376** has two measurement graduations **360** and **362**. They have been marked "2 TBSP" **359** and "1 TBSP" **361** respectively. These measurement graduations **360** and **362** may encompass the entire container at the intersection of a plane parallel to the ground **390** and any other portion of the container **350** provided that plane's height from the ground corresponds to approximately the correct volume that is indicated.

Embodiment 3, Figure 13 is a cross section of a cylindrical container **400**, which has been tilted such that its rim **445** is contacting the ground **440**. The act of tilting the container has created a pseudo supplemental measurement depression of micro scale **421** that consists of the container sidewall **420** and the bottom **426**. Tilting the container **400** until the rim **445** makes contact with the ground **440** provides an easy way to assists the user in orienting the container at the proper angle for making micro measurements. The pseudo supplemental measurement depression **421** has four measurement graduations **402, 404, 406** and **408**. They have been marked "4 TSP" **401**, "3 TSP" **403**, "2 TSP" **405** and "1 TSP" **407** respectively. These measurement graduations **402, 404, 406** and **408** may encompass the entire container at the intersection of a plane parallel to the ground **440** and any other portion of the container **400** provided that plane's height from the ground corresponds to approximately the correct volume that is indicated. The container

400 has measurement graduations of a macro scale **431**, **432** and **433**. They are marked "1 GAL" **416**, "2 GAL" **417** and "3 GAL" **418** respectively.

Embodiment 3, Figure 14 is a cross section of a cylindrical container **450**, with a rim **495**, which has been extended on one side **498**. The extension **498** has a handle opening **497**, a handle **499** and an edge **496** that is substantially flat. The container **450** has been tilted such that the edge **496** is contacting the ground **490**. The act of tilting the container has created a pseudo supplemental measurement depression of a micro scale **475** that consists of the container sidewall **470** and the bottom **464**. Tilting the container **450** until the edge **496** makes contact with the ground **490** provides an easy way to assists the user in orienting the container at the proper angle for making micro measurements. The pseudo supplemental measurement depression **475** has six measurement graduations **452, 454, 456, 458, 460** and **462**. They have been marked "6 TBSP" **451**, "5 TBSP" **453**, "4 TBSP" **455**, "3 TBSP" **457**, "2 TBSP" **459** and "1 TBSP" **461** respectively. These measurement graduations **452, 454, 456, 458, 460** and **462** may encompass the entire container at the intersection of a plane parallel to the ground **490** and any other portion of the container **450** provided that plane's height from the ground corresponds to approximately the correct volume that is indicated. The container itself **450** has measurement graduations of a macro scale **481**, **482** and **483**. They are marked "1 GAL" **466**, "2 GAL" **467** and "3 GAL" **468** respectively.

Embodiment 3, Figure 15a, is a plan view of a label **540** made from both water resilient material and adhesive backing or from a static cling. For reference, a circle representing the bottom of a cylindrical container **500** is shown. The upper portion **501** of the label **540** is to be adhered to the bottom of a cylindrical container of the proper

diameter. Once the upper portion **501** is attached, the lower portion **502** may be attached to the sidewall of said container (this is further explained in figure 15b). Printed on the upper portion **501** are five measurement graduations **504, 506, 508, 510** and **512**. They have been marked "5 TBSP" **503**, "4 TBSP" **505**, "3 TBSP" **507**, "2 TBSP" **509** and "1 TBSP" **511** respectively. Printed on the lower portion **502** are five measurement graduations **532, 530, 528, 526** and **524**.

Embodiment 3, Figure 15b is a cross sectional drawing of a cylindrical container **545** which shows the installation of the label from Figure 15a **540.** The upper portion **501** of the label is shown adhered to the bottom **547** of the container **545**. The lower portion **502** of the label is shown adhered to the sidewall **548** of the container **545**. The container **545** is shown tilted and resting on the ground **546**.

Embodiment 4, Figure 16 is a top and a front view of an auxiliary supplemental measurement depression **550**. The auxiliary supplemental measurement depression **550** has pressure sensitive adhesive **560** applied to the underside of its bottom **565**. The pressure sensitive adhesive **560** will be used to secure the auxiliary supplemental measurement depression **550** to the bottom of the proper size container (not shown). A measurement depression **568** is formed in the auxiliary supplemental measurement depression **550** by the inside sidewall **566** and the bottom **565**. A concentrate may be poured into the measurement depression **568** up to any given measurement graduation that may be marked on the inside sidewall **566**. Once the said concentrate reaches the desired level, a dilutent may be added. In adding a dilutent, the resulting solution will spill over the auxiliary supplemental measurement depression apex **564** and continue down the outside sidewall **567**.

Embodiment 4, Figure 17 is an isometric view of the auxiliary supplemental measurement depression **550** of Figure 16. On the sidewall **566** there are two measurement graduations **551** and **553**. They have been marked "2 TBSP" **552** and "1 TBSP" **554** respectively.

Embodiment 4, Figure 18 is a sectional view of a cylindrical container **570** that has the auxiliary supplemental measurement depression **550** of Figure 16 attached to the container's bottom **571**. The auxiliary supplemental measurement depression **550** is of a size relative to the container **570** such that the amounts of the micro measurements made in the auxiliary supplemental measurement depression **550** will be meaningful to the user.

Embodiment 4, Figure 19 is a top, front and profile view of an auxiliary supplemental measurement depression array **650**. The auxiliary supplemental measurement depression array **650** has pressure sensitive adhesive **651** applied to the underside of **650**. The pressure sensitive adhesive **651** will be used to secure the auxiliary supplemental measurement depression array **650** to the bottom of the proper size container (not shown). As a fluid concentrate is poured into the auxiliary supplemental measurement depression array **650**, it first hits the initial descending sidewall **653a** and begins to fill the initial supplemental measurement depression **656a**. The initial descending sidewall **653a**, the initial ascending sidewall **655a** and the trough walls **660a** and **660b** defines the initial supplemental measurement depression **656a**. Once the concentrate fills the initial supplemental measurement depression **656a**, it begins to spill over the initial measurement apex **658a**. It does not spill over the trough apex **652** because **652** is substantially higher than the initial measurement apex **658a**. As the fluid concentrate spills over the initial measurement apex **658a**, it proceeds down the

secondary descending sidewall **653b** and begins to fill the secondary supplemental measurement depression **656b**. The secondary supplemental measurement depression **656b** is defined by the secondary descending sidewall **653b**, the secondary ascending sidewall **655b** and the trough walls **660a** and **660b**. Once the fluid concentrate has filled the secondary supplemental measurement depression **656b**, it will spill over the secondary measurement apex **658b** and proceed down the third ascending sidewall **653c** and begin to fill the third supplemental measurement depression **656c**. The third supplemental measurement depression **656c** is defined by the third descending sidewall **653c**, the third ascending sidewall **655c** and the trough walls **660a** and **660b**. The fluid concentrate will then spill over the third supplemental measurement depression apex **658c** once the third supplemental measurement depression **656c** is filled. This pattern of events continues either until the user stops pouring the fluid concentrate or all of the five supplemental measurement depressions **656a, 656b, 656c, 656d** and **656e** have been filled.

Embodiment 4, Figure 20 is an isometric view of an auxiliary supplemental measurement depression array similar to that shown in figure 19, however, there are four supplemental measurement depressions **730, 731, 732** and **733** as opposed to five. The supplemental measurement depressions **730, 731, 732** and **733** are marked with the measurement indices of "1 TBSP" **720**, "2 TBSP" **721**, "3 TBSP" **722** and "4 TBSP" **723** respectively.

Embodiment 4, Figure 21 is a sectional view of a cylindrical container **750** that has the auxiliary supplemental measurement depression array **650** of Figure 19 attached to the container's bottom **751**. The auxiliary supplemental measurement depression array

650 is of a size relative to the container **750** such that the amounts of the micro measurements made in the auxiliary supplemental measurement depression array **650** will be meaningful to the user.

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